

REMARKS/ARGUMENTS

Claims 16, 27, 39, 41, and 44 are amended, and claims 46-49 are new. Claims 1-15 and 31-35 have been canceled. Claims 16-30 and 36-49 are now pending in the application. Applicants respectfully request reexamination and reconsideration of the application.

Applicants acknowledge with appreciation the Examiner's indication that claims 36-45 are not rejected in view of prior art. As discussed below, Applicants believe that the rejections and objections to all pending claims are overcome and the application is in condition for allowance.

Claims 16-30 and 36-45 were rejected under 35 USC § 112, first paragraph as allegedly not meeting the written description requirement with respect to the recitation in claims 16 and 27 that an electrically conductive plane is disposed between the conductive structure and the functional circuitry recited in claims 16 and 27. Applicants respectfully traverse this rejection.

As stated in paragraph [0035] of the specification, DUT 18 (which can be a non-limiting example of a die) can be part of an unsingulated semiconductor wafer, and paragraphs [0046] and [0048] state that DUT 18 can comprise functional circuitry. Figure 2A shows a ground plane 72 and a power plane 70 (either of which can be a non-limiting example of an electrically conductive plane) disposed between a coupling pad 32 (which can be a non-limiting example of a conductive structure) and DUT 18. The specification thus sufficiently describes the recitations in claims 16 and 27. Applicants therefore request that the rejection under 35 USC § 112, first paragraph be withdrawn.

Claims 16-30 and 36-45 were rejected under 35 USC § 112, second paragraph on the grounds that a functional relationship is allegedly not recited between the plane recited in claims 16 and 27, the plurality of planes recited in claims 39 and 44, the conductive structure of claims 16 and 27, and the functional circuitry recited in claims 16 and 27. Applicants respectfully traverse this rejection on the grounds that 35 USC § 112, second paragraph does not require that such a functional relationship be recited. Rather, 35 USC § 112, second paragraph requires only that the scope of the claim be reasonably clear. (See MPEP § 2173.) Here, the claims recite positional relationships among the plane, planes, contact structure, and functional circuitry. For example, claims 16 and 27 recite that the plane is disposed between the contact structure and the functional circuitry, and claims 39 and 44 recite that the planes are disposed between the contact structure and the functional circuitry. The scope of the claims is thus clear: the plane (as cited in

claims 16 and 27) or the planes (as recited in claims 39 and 44) are between the contact structure and the functional circuitry. Claims therefore meet the requirements of 35 USC § 112, second paragraph. Applicants therefore request that the rejection under 35 USC § 112, second paragraph be withdrawn.

Claims 39-45 were objected to. Claims 39, 41, and 44 has been amended to address the Examiner's concerns. Applicants believe that the objection has been overcome.

Claims 16-30 were rejected under 35 USC § 103(a) as obvious in view of US Patent No. 6,885,202 to Slupsky and US Published Patent Application No. 2005/0138499 to Pileggi et al. ("Pileggi"). Applicants respectfully traverse this rejection.

In rejecting independent claim 16, the PTO equated Slupsky's dies 12 with the die recited in claim 16, and the PTO equated Slupsky's wireless I/O cells 14 with the contact structure recited in claim 16. Acknowledging that Slupsky does not disclose a conductive plane disposed between a die 12 and a wireless I/O cell 14, the PTO equated Pileggi's multiplexing circuit 212 with the conductive plane recited in claim 16. A multiplexing circuit, however, is not a conductive shielding plane. In the field of electronics, a shield is a "structure or arrangement of metal plates or mesh designed to protect a piece of electronic equipment from electrostatic or magnetic interference." (See the excerpt from www.dictionary.com attached as page 9 of this paper.) As is known, a multiplexing circuit is, in essence, a switch in which one of a plurality of inputs is connected to an output. A multiplexing circuit is not a shield as that term is commonly understood in the field of electronics. (See the attached definition of "shield.") For at least the foregoing reason, independent claim 16 is patentable over Slupsky and Pileggi.

Claim 27 also recites "an electrically conductive shielding plane." Independent claim 27 is therefore patentable over Slupsky and Pileggi at least generally for the same reason as discussed above with respect to claim 16.

Claims 17-30 and 46-49 depend from one of claim 16 or claim 27 and, at least because of that dependency, are also patentable over Slupsky and Pileggi. Moreover, claims 17-30 and 46-49 recite additional features not taught or suggested by Slupsky and Pileggi. For example, Claims 46 and 48 recite that the shielding plane shields a die from electrical interference. Pileggi expressly states that multiplexing circuit couples to the dies 202. (Pileggi paragraph [0020].) Moreover, as is known, a multiplexing circuit, like Pileggi's multiplexing circuit 212, does not

shield from electrical interference. For at least this reason, claims 46 and 48 further distinguish over Slupsky and Pileggi.

As another example, Claims 47 and 49 recite that the shielding plane is a structure that substantially covers a die. As can be seen in Figure 2 of Pileggi, multiplexing circuit 212 is not such a structure. For at least this reason, claims 47 and 49 further distinguish over Slupsky and Pileggi.

In view of the foregoing, Applicants submit that all objections and rejections are overcome and all of the pending claims are allowable and the application is in condition for allowance. If the Examiner believes that a discussion with Applicants' attorney would be helpful, the Examiner is invited to contact the undersigned at (801) 323-5934.

Respectfully submitted,

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ATTACHMENT

From www.dictionary.com:

shield

-noun

8. *Electricity*, a covering, usually made of metal, placed around an electric device or circuit in order to reduce the effects of external electric and magnetic fields.